

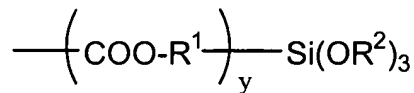
AMENDMENTS TO THE CLAIMS

1-2. (Cancelled)

3. **(Currently Amended)** A copolymer according to Claim **[[1]] 16**, wherein said reactive silicon-containing group is an alkoxysilyl-containing group.

4. (Cancelled)

5. **(Currently Amended)** A copolymer according to Claim **[[1]] 16**, wherein said A has a structure represented by the following formula



wherein, R¹ is an alkylene group having 1 to 10 carbon atoms or an arylene group having 6 to 20 carbon atoms, R² is an alkyl group having 1 to 10 carbon atoms, and y is 0 or 1.

6-7. (Cancelled)

8. **(Currently Amended)** A copolymer according to Claim **[[1]] 16**, wherein said Q is a hydrogen atom, a carboxyl group, an alkoxycarbonyl group having 1 to 9 carbon atoms, an alkyl group having 1 to 8 carbon atoms, an aryl group having 6 to 20 carbon atoms or a halogen atom.

9. **(Currently Amended)** A method of producing a copolymer according to Claim **[[1]] 16**, comprising the step of radical-polymerizing a monomer mixture containing an unsaturated monomer

having a reactive silicon-containing group and an unsaturated monomer compatible with said reactive silicon-containing group by using a macropolymerization initiator having a polycondensation segment.

10. **(Currently Amended)** A method of producing a copolymer according to Claim [[1]] 16, comprising the step of radical-polymerizing a monomer mixture containing an unsaturated monomer having a reactive silicon-containing group, an unsaturated macromer having a polycondensation segment and an unsaturated monomer compatible with said reactive silicon-containing group.

11. **(Currently Amended)** A method according to Claim [[9]] 16, wherein said reactive silicon-containing group is an alkoxysilyl-containing group.

12. (Cancelled)

13. **(Currently Amended)** A method of producing an organic-inorganic hybrid polymeric material, comprising the step of hydrolyzing and polycondensing the copolymer according to Claim [[1]] 16.

14. **(Currently Amended)** A method of producing an organic-inorganic hybrid polymeric material, comprising the step of hydrolyzing and polycondensing the copolymer of Claim [[1]] 16 in

the presence of a metal, a metal alkoxide compound, a metal oxide, a metal complex or an inorganic salt selected from the group consisting of Si, Ti, Zr, Al, Fe, Cu, Sn, B, Ge, Ce, Ta and W.

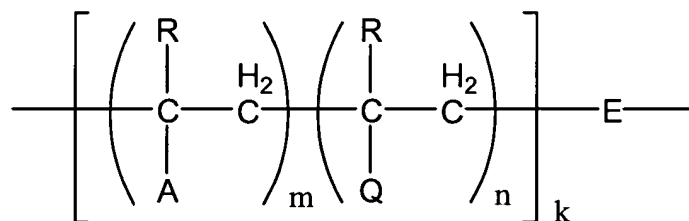
15. (Original) An organic–inorganic hybrid polymeric material produced by the method according to Claim 13 or 14.

16. (Previously Presented) A copolymer comprising:

a polyethylene segment which is a main chain;

a reactive silicon–containing group which is a side group of the polyethylene segment; and

a polycondensation segment bonded to the polyethylene segment, which is a part of the main chain together with the polyethylene segment or a side chain with respect to the polyethylene segment, which comprises a repeating unit represented by the following formula



wherein,

A is a reactive silicon–containing group,

R is each independently a hydrogen atom or an alkyl group having 1 to 8 carbon atoms,

Q is a group compatible with the reactive silicon–containing group,

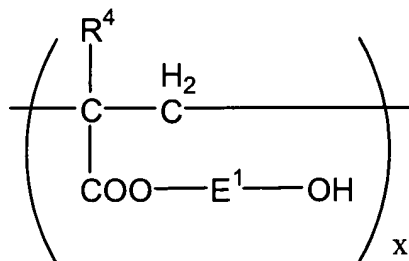
E is a polycondensation segment which is a part of a main chain, or a polyethylene segment having a polycondensation segment as a side chain,

m is an integer of 1 or more,

n is an integer of 0 or 1 or more,

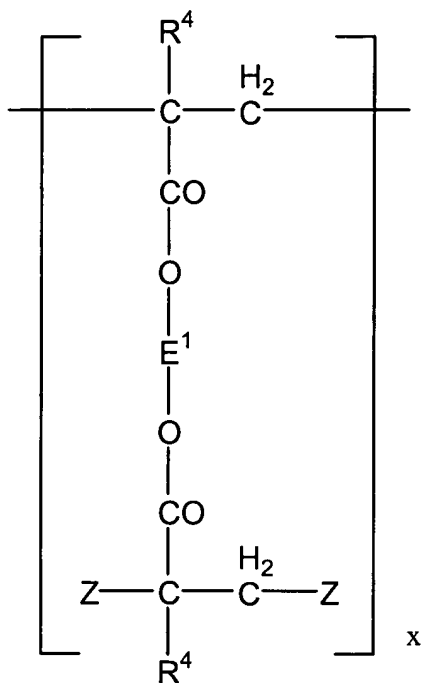
k is an integer of 1 or more, and

E has a structure represented by the following formula



wherein, E¹ is a segment of polycarbonate, polyarylate or polysulfone, R⁴ is a hydrogen atom or an alkyl group having 1 to 8 carbon atoms, and x is an integer of 1 or more;

or the following formula



wherein, E¹, R⁴ and x are the same as defined above, and Z is each independently a segment of another polymer.